bacteria will be found in the milk as soon as same is drawn.

When the cows are cleaned, udders washed, surroundings favorable, milkers more or less intelligent, and management assumes the responsibility, realizing that milk could serve as an excellent disease-transmitting agent, sufficient cold applied, the result is clean milk; in other words, a minimum introduction of bacteria and less multiplication of same, as seen from the results of Series No. 3 and those of Series No. 1.

It seems to the writer that a bacterial count of milk is one of the most valuable aids in forming a comparative idea as to the sanitary condition of the different sources of the milk supply, and it is one of the subjects which is attracting attention among bacteriologists and public health officers, as seen from the standards adopted by many municipal governments.

The criticism as to the inconsistency of standards relative to the maximum number of bacteria to be found in milk is based:

That milk is an excellent culture media for the growth of bacteria and their multiplication; consequently, the number of bacteria do not speak for its sanitary condition.

That the bacteria found in milk are of a harmless variety.

In the first place, inasmuch as having established the fact that the high number of bacteria is due to the unsanitary condition of the dairies, then, even assuming that a given supply is free from dangerous contamination, it also is natural to believe that sooner or later the supply might serve as one most dangerous to health.

The well-known outbreaks of typhoid fever, scarlet fever, diphtheria, tuberculosis, and sore throat, which have been traced to the using of milk from sources where sanitary conditions were neglected, go to prove that milk with a high bacterial count is not fit to be used.

In the second place, the writer agrees and is thoroughly convinced that a hundred c. c. of milk containing one typhoid bacillus would prove more dangerous to health than millions of ordinary bacteria were found in one c. c. At the same time it is worth while realizing that even the saprophytic bacteria, under favorable conditions by their rapid multiplication and the production of their metabolic substances into the system, will occasion morbid conditions, hence so many digestive troubles, sicknesses, and the high mortality amongst infants.

Because of the above mentioned, milk with a high number of bacteria is not fit for human consumption, and it seems that the conception as to the value of the bacterial standards must be modified somewhat.

Bacterial standards based on scientific investigations adapted to the conditions of the different localities are the only best guaranty in preventing a given commonwealth from using unclean milk. The maximum number of bacteria that are to be found in milk can be brought to a specified standard, adopted only by using strict, vigorous methods

as to sanitation, and it should be the aim of the health institutions to secure enactments putting the same into practice.

In conclusion, I wish to say that the practical methods of hygiene and sanitation used by Dr. A. E. Osborne, Medical Superintendent, Napa State Hospital—to whom I owe my sincere thanks—suggested to me the idea of this undertaking.

REFERENCES.

- 1. Rosenau: Bull. 41, Hyg. Lab. Chapter on "The number of bacteria in milk and the value of bacterial counts."
- 2. Wellem and Miele: Compt. Rend. du 13 Internat. Cong. d'Hyg., 1903, vol. 3, p. 67.
 3. Wyman: Bull. 56, Hyg. Lab., p. 16.
- p. 4. Park: N. Y. Univ. Bull. of Med. Sci., vol. 1, 1901,
- 5. Conn. Dairy Bacteriology: Bull. 25, U. S. Dept. Agr., p. 9.
- 6. Hunziker: Bull. 197, Agr. Exp. Sta. Cornell Univ. 7. Rosenau and McCoy: Chapter on "The germicidal properties of milk." Bull. 56, Hyg. Lab., U. S. P. H.—M. H. S., pp. 457-487.

HEREDITARY PIGMENTED NEVUS?

By ALBERT SOILAND, M. D., Los Angeles.

The patient, Mrs. M., age 32, healthy and well nourished, has a very fair skin, brown eyes and abundant straight yelow hair.

She gives a history which throws no light upon the causative factors responsible for the peculiar symmetrical pigmentation around eyes and upper part of face, as shown in plate No. 1. No member of family has ever been marked in this manner,



and patient was entirely free from blemish during childhood.

Pigmentation began when she was twenty years old, became rapidly dark, and was a source of much embarrassment. Recourse was had to local applications, and cauterants of various kinds, without benefit.

Saw patient in consultation February, 1911, and found her as depicted, pigmented areas black, noninflammatory, and no change in color upon pressure. Decided to employ the Roentgen-rays, which were accordingly pushed to induce a rapid superficial radio-dermatitis, during a period of one month's duration.

The patient at present is free from blemish, and it is fair to assume that the treatment has been successful.



Although patient specifically denies any ethiopian taint, the facial characteristics strongly justify the conclusion of hereditary pigmentation, or a fragmentary reversion to type.

A CASE OF COMPLETE TRANSPOSITION OF THE VISCERA.*

By FAYETTE WATT BIRTCH, M. D., San Francisco.

The following case of complete transposition of the viscera was seen in the practice of Dr. Lemuel Francis Jones and it is due to his courtesy that I am permitted to call it to your attention.

am permitted to call it to your attention.

The patient, Mr. R.; age 22; German; salesman by occupation.

Family history: No history of twins in the family, no congenital mal-developments in any of his relatives. Mother, father, two sisters and one brother dead with tuberculosis.

Past history: Had pneumonia at seven years of age. Two attacks of typhoid fever, the last three years ago. Was operated upon for exploded appendix in May, 1912. The operator reports the following history of the case: The patient came under the care of Dr. Jones May 7, 1912, and stated that on the evening of May 6th he had generalized pain in the abdomen accompanied with nausea and vomiting. Examination disclosed localized pain, tenderness, and rigidity in the lower left quadrant. The abdomen was then quite distended and no normal liver dullness could be demonstrated. The temperature was 101.6°; pulse 112, thready but regular; respirations 32; leukocytes 19,000; polymorphonuclears 95%.

Diagnosis: Probable perforated appendix with spreading peritonitis. On account of the location of the pain and tenderness a long appendix extending well over to the left side or a transposed appendix was considered. A careful examination of the heart was not made at this time, and its true position was overlooked until the operator was in-

* Read at the meeting of the Section on Surgery of the San Francisco County Medical Society, August 20th, 1912. formed by the anesthetist that the patient's heart

was transposed.

Operation: Vertical incision was made just to the right of the median line. When the peritoneum was opened the abdominal cavity was found filled with thin purulent fluid. The sigmoid was observed descending from the right, the cecum and the appendix on the left. The cecum was delivered into the wound and the appendix removed in the usual manner. The wound was closed with drainage. The patient made an uneventful recovery.

A physical examination of this patient made in June, 1912, by the ordinary methods and confirmed by X-ray pictures of the chest and bismuth X-ray pictures of the stomach and the intestines showed the following anatomical arrangement of the viscera: The heart was found to be on the right side with apex in the fifth right intercostal space just inside of the nipple; the liver was on the left side; the greater curvature of the stomach extended to the right with the pylorus ending just to the left of the spinal column; the cecum in the left liliac region; the sigmoid continuing down into the rectum from the right side; the right testicle lower than the left.

In reviewing the reported cases of transposition of the viscera, the following points thus obtained may be of interest: The etiology of this condition is obscure. It has been advanced that transposition can be accounted for by the individual being one of a monochorial twin pregnancy; that is, one derived from a longitudinal division of a single ovum; the individual in fact being a complete reflection of a twin brother. In case of a negative history of twin pregnancy it is considered that the other individual becomes a fetus acardiacus. Others have laid the cause at the door of heredity, of blood relationship in parents, of acute illnesses of the mother, of fright in early pregnancy, and of early fetal diseases. Probably the best theory thus far advanced is that the main current of blood to or from the germinal area becomes diverted at an early period, and thus purely mechanical influences lead the vessels of one side of the organism to receive more blood and therefore to grow more vigorously than those of the other. It is clear, however, that these many hypotheses have far from clarified the subject.

With our present knowledge of the subject it seems appropriate to draw the following conclusions:

First, transposition of the viscera is uncommon without dextracardia.

Second, transposition of the testicles with dextracardia without transposition of the viscera, so far as I have been able to learn, has not been recorded.

Third, with transposition of the viscera additional malformations and malpositions are frequently encountered; as congenital cardiac disease, persistent thymus, harelip, cleft palate, etc.

Fourth, in a case showing symptoms of left-sided appendicitis or left-sided gall bladder disease, the suspicion can at once be confirmed by finding the heart and testicles transposed and thus avoid the mistake of making the wrong incision, as was done in this case and in a similar case reported by Mr. Moynihan.

Fifth, if time and circumstances permit a fluroscopic examination or X-ray plates will show the true anatomical conditions.

REPORT OF A CASE OF PYEMIA.

By W. B. COFFEY, M. D., and W. T. CUMMINS, M. D., San Francisco.

J. R. S., age 27, American, brakeman, was admitted to Southern Pacific General Hospital, Feb. 14, 1912. Family history negative. Previous history: Usual diseases of childhood except scarlet